## **Upper Mississippi River National Wildlife Refuge Complex Comprehensive Conservation Plan**

## **Issue Fact Sheet**

The Issue: Impacts to Refuge from Adjacent Lands

**Background:** The 1987 Upper Mississippi River National Wildlife and Fish Refuge Master Plan rated threats to water quality and related habitat impacts from land use intensification throughout the surrounding landscape as one of our most important and difficult challenges. The threats come from a wide variety of developmental and agricultural activities that collectively contribute to accelerated runoff, increased erosion, flooding, sedimentation, and pollution from excess nutrients and chemicals. Information from the past 20 years is summarized in the March 2002 Upper Mississippi River Water Quality Assessment, prepared and distributed by the Upper Mississippi River Conservation Committee's (UMRCC) Water Quality Technical Section.

Water quality problems that threaten human health, as well as fish and wildlife, can often be traced to "non-point sources" of pollution. The UMRCC report documents generally higher nutrient levels from major tributaries during the 1990s than was recorded during the 1980s, probably associated with wetter conditions, above average flows, and increased delivery of total suspended solids. This trend undoubtedly contributed to more eutrophic conditions in some backwaters and hypoxia (oxygen depletion) in the Gulf of Mexico. Such trends can only be resolved through long-term cooperative approaches to conservation. This is where locally led partnerships, such as interagency basin alliances, can help protect public trust resources. But to protect and restore habitats on private lands that will, in turn, buffer water quality and habitats needed to support refuge fish and wildlife, much more extensive coordination, funding and technical assistance are needed.

## **Main Concerns:**

- 1. Most of the programs and resources necessary for successful private lands conservation are scattered among other agencies and organizations. There is a lack of coordination to ensure that water quality and habitat concerns are fully addressed in land use decisions.
- 2. Decision support information and tools making it possible to inventory, map, track and prioritize critical areas for habitat restoration and water quality enhancement are now readily available, but few people know how they can be accessed.
- 3. The USFWS Partners for Fish and Wildlife Program, which began in the mid-1980s, assists landowners, in cooperation with other agencies and organizations, but current refuge staff and funding are inadequate to provide districts additional dedicated staff positions for outreach, technical assistance and coordination.